In the Boxing Ring

Network Box Technical News

from Mark Webb-Johnson, CTO Network Box

Welcome to the November 2014 edition of In the Boxing Ring

This month, we are releasing two major new features for Network Box 5: 1) Cloud Mail Backup and 2) A switch to a new Inter-Process Communication mechanism known as nBus. With the Network Box Cloud Mail Backup system, if there is a problem with the network, server or device, the mail will be stored in the cloud and delivered when the problem has been resolved. This is discussed in greater detail on pages 2-3.

On pages 4-5, we highlight the features and fixes to be released in this month's patch Tuesday for Network Box 5 and Network Box 3. We continue to develop, and will continue to support, Network Box 3 for the foreseeable future (several years).

Finally, we are proud to announce that Network Box 5 won a prestigious CTR 'Top 25 Must Have Software Applications Award 2014'. In addition, Network Box Germany was at the it-sa 2014 IT security exhibition, and Network Box Managing Director, Michael Gazeley, was a keynote speaker at the Information Security Summit 2014.

Mark Webb-Johnson
CTO, Network Box Corporation Ltd.
November 2014

You can contact us here at HQ by eMail (nbhq@network-box.com), or drop by our office next time you are in town. You can also keep in touch with us by several social networks:

twitter http://twitter.com/networkbox

facebook http://www.facebook.com/networkbox
http://www.facebook.com/networkboxresponse

Linked in http://www.linkedin.com/company/network-box-corporation-limited

Google+ https://plus.google.com/u/0/107446804085109324633/posts

In this month's issue:

NETWORK BOX

Network Box
Cloud
Mail
Backup

Network Box is pleased to announce the global launch of our Network Box Cloud Mail Backup system. This Network Box 5 based, cloud email queuing system, is a very significant upgrade to the local (appliance based) email queuing system, which is an existing part of Network Box 3.

Email queuing on the Network Box 3 platform, has always been an extremely popular feature. This built-in business continuity system, helps to mitigate the risk of emails being 'bounced,' or otherwise lost, due to issues with clients' email servers.

In the event of a client's email server having a problem, regardless of it being a hardware failure or a software fault, as long as the email server concerned is unable to receive emails, the client's Network Box 3 system will store and queue up the undelivered emails on its local hard disk drive, ready to automatically deliver them, as soon as the issue with the client's email server has been resolved.

In the case of Microsoft Windows based email servers, which require regular updating, patching, and rebooting, the email queuing system on Network Box 3, is a great way to prevent business interruptions to incoming emails, with senders not even being aware that the clients' email systems was down at the time of reception.

However, there are certain circumstances where the Network Box 3 email queuing system is not able to help. Examples include problems with Internet connectivity, power-cuts, faulty switches, or bad cable connections. Essentially, if the fault is behind the Network Box 3 email queue, it can help. If the fault is either in front of, or includes the Network Box 3 system, then it cannot help.

NETWORK BOX

- Clients will have full control over which of their domains will use the service.

- Clients will have full control over which cloud backup servers will be used to back up their mail, so that their email never leaves a certain geographic region. For example, to meet local legal requirements.

- In the event the primary MX servers cannot be contacted, if so configured, the client's email will be redirected to, received by, and stored on the cloud backup servers. These servers will periodically, and repeatedly, attempt to deliver such email to the primary MX servers, and will queue the emails until such time as delivery is successful.

- Once delivered, the email will be removed from the cloud backup servers, and only logs (containing date, time, sender and recipient) will be retained.

- Only email current queued for delivery to an unreachable primary MX server, will be stored on the cloud backup system, and such emails will only be stored on servers explicitly designated as to be used by the customer in his DNS MX records.

- This backup queueing will also occur if the primary MX servers are overloaded and temporarily not accepting new connections / emails.

- Should a particular cloud backup service be unavailable for any reason, it will not provide mail backup services, and will not redirect mail to an alternative geographical region.

- Only inbound mail backup service is provided.

- The cloud backup servers will not accept or queue any emails larger than 10MB.

- The cloud backup servers will not issue any NDR (Non-Delivery-Receipts).

- The cloud backup servers will queue emails for a maximum of 5 days.

- No SMTPS service is provided.

- No recipient verification is attempted other than the domain check.

In contrast, the Network Box 5 based, cloud email queuing system, can help mitigate problems with receiving emails, regardless of where the local fault resides. The Network Box Cloud Mail Backup system operates independently, in the event that a client has a local issue impacting the reception of email at their email gateway.

This new in-the-cloud mail queuing facility, allows all email to be backed up in the cloud, so if there is a problem with the ISP, the internal network, or the email server, the mail will be stored in the cloud, and delivered when the problem is resolved.

In order to ensure maximum resiliency, Network Box has deployed a globally distributed set of high speed cloud servers that act as backup MX (Mail eXchange) servers, for customer SMTP mail.

It is possible to define exactly which email domains will enjoy this cloud backup service, using a new 'Box Office' configuration system. 'Box Office,' will also give an overview of the current status of the cloud mail backup system. In addition, an on-the-box overview of the current status of the cloud mail backup system will be available, on the HTML-5 Dashboard.

This is a FREE SERVICE provided to all Network Box 5 customers subscribing to our various Managed Security Services that include email scanning, such as our AV+ and UTM+ services.

At any given time, the current status of cloud mail backup for a particular customer can be checked in 'Box Office,' by looking at the owner account, 'Cloud Mail Backup Domains' section. (This is typically updated once a minute.)

This is the first of many cloud services that Network Box will be launching over the coming months. The intent of this work is to offer improved security, functionality, and business continuity, by leveraging cloud technologies, to improve on what we can offer Network Box clients around the world.

NETWORK BOX

Network Box 5
NEXT GENERATION MANAGED SECURITY

This month, we are pleased to announce the release of two major new features:

1. **Cloud Mail Backup - discussed on pages 2-3 of this newsletter.**
2. **A switch to a new Inter-Process-Communication mechanism known as nBus.**

In particular, the switch to nBus is bringing significant performance (three-to-four times improvement in most cases) and stability improvements to the administrative and user web interfaces. You should see this dramatic improvement as soon as you login to the new web interfaces, but the enhanced performance is most evident when remotely maintaining the device over high-latency links.

Both these improvements are released as the first 'dot' improvement to Network Box 5; as this version v5.1 is today released.
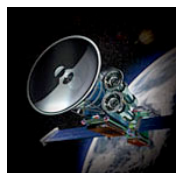
Network Box 5 Features
November 2014

On Tuesday, 4th November 2014, Network Box will release our patch Tuesday set of enhancements and fixes. The regional SOCs will be conducting the rollouts of the new functionality in a phased manner over the next 7 days. This month, for Network Box 5, these include:

- Release version v5.1 of Network Box 5, incorporating nBus and the first cloud service
- Support for Cloud Mail Backup in core administrative interface
- Support for Cloud Mail Backup in administrative web interface
- Introduction of nBus Inter-Process-Communication mechanism
- Support for nBus in Signature Reception subsystem
- Support for nBus in Provisioning subsystem
- Support for nBus in Configuration subsystem
- Bridging support between nBus and dBus Inter-Process-Communication systems
- Provisioning signatures regarding nBus connections for nbconsole, nbconfig, nbsigrecv and nbprovision subsystems
- Enhanced support for custom options in DHCP server
- Enhanced support for recording message body receive and transmit times under POP3 protocol
- Generation of unique record IDs for emails transferred by POP3 protocol
- Introduction of a client keepalive facility (via X-Scan headers) in POP3 protocol (for large mail transfers)
- Enhanced support for DDoS whitelist enforcement at both listing and dynamic/permanent block times
- Improvements to display of dynamic interface local routes

- Switch to use UTC for BIOS date/time support (improved support for time zones and daylight savings time)
- Enhanced support for new Top Level Domains in eMail anti-spam scanning
- Miscellaneous improvements in KPI reporting and display
- Change to free memory calculation to unify the algorithm for reporting memory usage in Global Monitoring System and other displays
- Enhancement to show the package release level in information displays
- Enhancement to add mail classification to default report template
- Relax rules for enforcement of syntax in domain specifications (to allow for local host definitions)
- UTF-8 support in console and custom templates
- Improvements to proxy support for CONNECT method in directed HTTP proxies
- Enhanced support in IPSEC VPN for connections from dynamic remote IP addresses
- Improvements to SSL VPN to add support for static keys, and configurable UDP/TCP protocol
- Improvements to SSL inspection by using the request hostname (when present) in cases where no SNI is presented by the client
- Improvements to handle error conditions in report generation that could result in multiple copies of a report being generated
- Improvements to column sorting in administrative web portal screens
- CVE-2014-4877: Absolute path traversal vulnerability in GNU WGET

In most cases, the above changes should not impact running services or require a device restart. However, in some cases (depending on configuration), a device restart may be required. Your local SOC will contact you to arrange this if necessary.

Should you need any further information on any of the above, please contact your local SOC. They will be arranging deployment and liaison.

NETWORK BOX

Network Box ISO 9001 / ISO 20000 / ISO 27001 certified Security Operations Centre, ensures that customers' networks are protected against cyber threats, 24x7x365.

Network Box 3 Features
November 2014

On Tuesday, 4th November 2014, Network Box will release our patch Tuesday set of enhancements and fixes. The regional SOCs will be conducting the rollouts of the new functionality in a phased manner over the next 7 days. This month, for Network Box 3, these include:

- Improvements to spam detection, related to exploits against '.link' top level domain
- Disabling of SSLv3 as an offered security protocol
- Improvements to my.network-box.com related to IDP / Overview counts.
- Various (mostly internal) enhancements to several internal support systems

In most cases, the above changes should not impact running services or require a device restart. However, in some cases (depending on configuration), a device restart may be required. Your local SOC will contact you to arrange this if necessary.

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Network Box Germany
it-sa 2014

Network Box Germany was at the it-sa 2014, which is the only IT security exhibition in the German-speaking region, and one of the most important security events worldwide.

Network Box
Computer Technology Reviews

Network Box is very proud to announce that we won a prestigious, CTR 'Top 25 Must Have Software Applications Award 2014.'

LINK: http://bit.ly/1tCaDcb

Network Box
Information Security Summit 2014

Network Box Managing Director, Michael Gazeley, gave a talk called, 'The Vulnerability of Everything,' at the Information Security Summit 2014. The talk highlighted the many new cyber attack vectors which we are seeing in the form of the 'physical internet,' which is a new term coined by Google.